

Recreation/Senior Center + Memory Square Improvements

Project Update Presentation | March 21, 2017

Project Update



**SINK
COMBS
DETHLEFS**
ARCHITECTURE DESIGN



DUNAKILLY

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Agenda

Recreation/Senior Center Design Update
Memory Square Design Update
Sustainable Opportunities
Project Timeline

Recreation/Senior Center

Total parking spaces: 296
Parking ratio: 2.9/1000
Current parking ratio: 3.0/1000

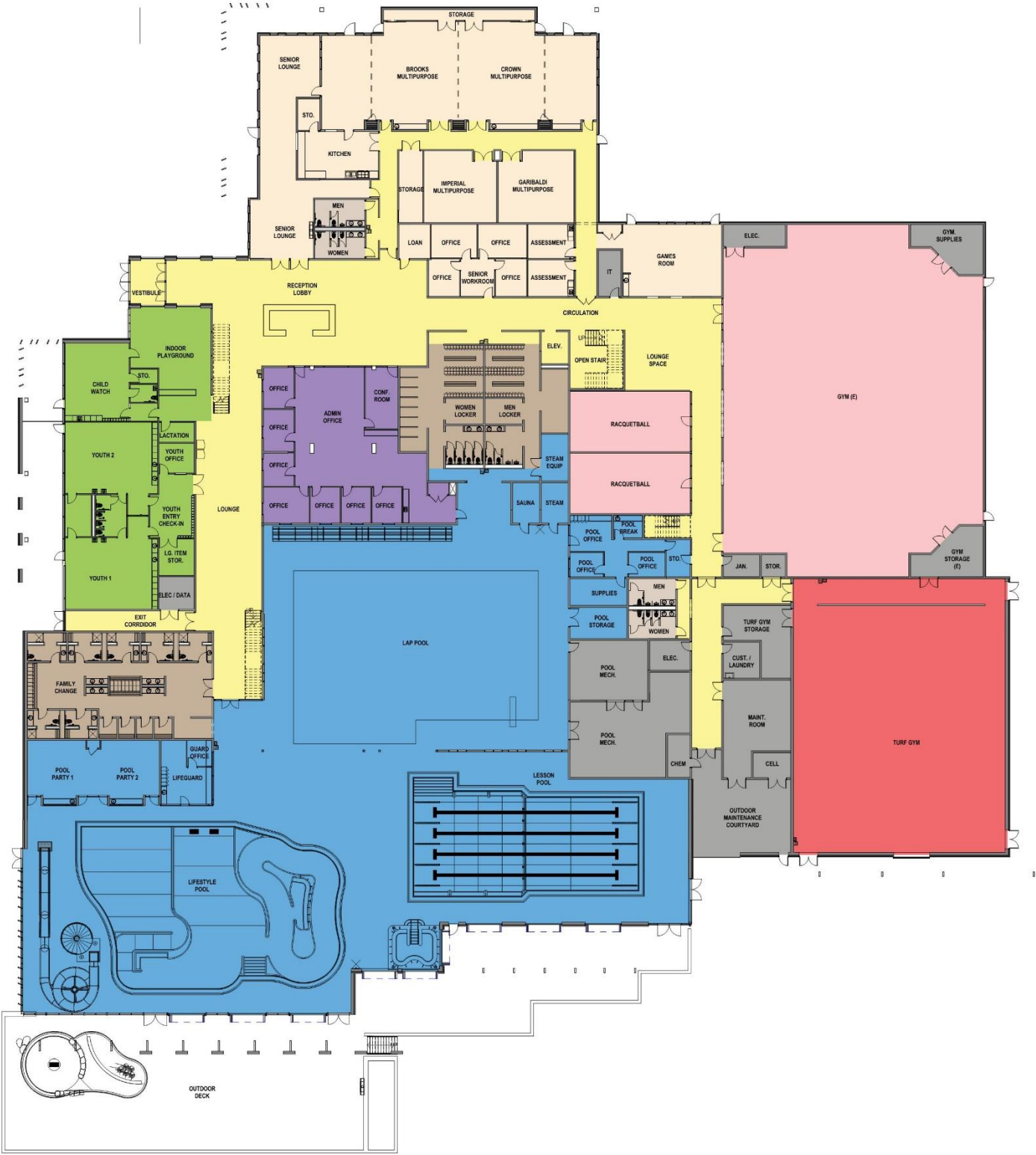


Recreation/Senior Center:
Site Plan

Recreation/Senior Center:

1st Floor Plan

- ADMINISTRATION
- AQUATIC
- BUILDING SUPPORT
- EXISTING RECREATION / FITNESS
- LOBBY / CIRCULATION
- LOCKER ROOM
- NEW RECREATION / FITNESS
- RESTROOM
- SENIOR CENTER
- YOUTH



Recreation/Senior Center:

2nd Floor Plan

- ADMINISTRATION
- AQUATIC
- BUILDING SUPPORT
- EXISTING RECREATION / FITNESS
- LOBBY / CIRCULATION
- LOCKER ROOM
- NEW RECREATION / FITNESS
- RESTROOM
- SENIOR CENTER
- YOUTH



View to entry

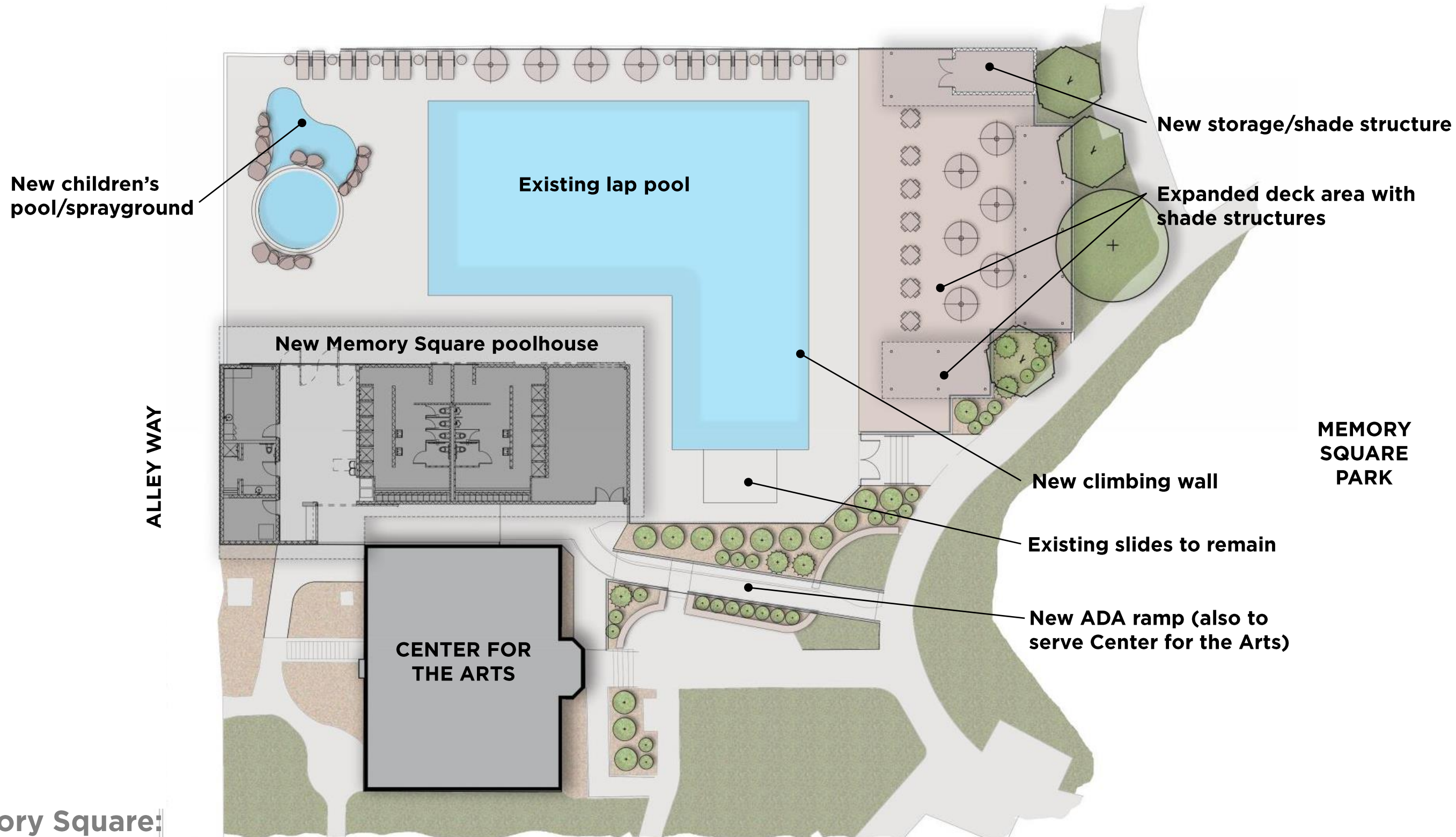


View to outdoor patio



Memory Square

**Memory Square:
Site Plan**



EXST
SITE
WALL

EAVE LINE
ABOVE

EXST POOL
(NO WORK)

WOOD PIVOT
PANEL DOOR

SLIDING WOOD
PANEL DOOR

- Lobby / Lounge
- Locker Rooms
- Office
- Services
- Storage

LIFEGUARD

WOMEN'S LOCKER

MEN'S LOCKER

POOL MECH.

FAMILY CHANGE

OPEN-AIR
LOUNGE

VENDING

STAFF STORAGE

IT

OH COILING
DOOR

OPEN-AIR BREEZEWAY ENTRANCE

EXISTING HISTORIC
CENTER FOR THE
ARTS

HISTORIC RESTORATION AND
REMEDATION AT NORTH
MASONRY WALL OF EXST.
CENTER FOR THE ARTS BLDG

Memory Square: Floor Plan

View to new poolhouse



View from children's
pool/sprayground



Actions Promoting Sustainability

Actions Promoting Sustainability

Site

Protected and restored existing natural site area and minimize the site impact from construction.

Limited stormwater runoff and improved water quality in on-site flows

Native and adapted plant species will be specified to reduce irrigation requirements and minimize the need for chemical applications

Ample bike racks provided to encourage non-vehicular transit and connection to local and regional trail network

Encourage multi-modal public transit by use of the shuttle system and bus transit.

Dedicated parking locations for alternative fuel vehicles and charging stations.

Minimize building and site light pollution by following dark sky guidelines and reducing nighttime lighting

Water Efficiency

Utilize water efficient plumbing fixtures reducing water use by 40%

Auto sensing lavatory faucets and shower fixtures

High-rate regenerative filter unit on pool reduces backwashing saving 1,000,000 gal/yr

Reduced irrigation water requirements by minimizing non-native and turf plantings

Energy Conservation

Highly insulated building envelope for increased energy efficiency

High performance low-e insulated glass for increased energy performance

High-efficiency HVAC systems utilizing VFD fans, heat pump supplement, and condensing reheat boilers

Demand control ventilation to modulate mechanical air flow to occupant load

High efficiency water heater

Automatic daylighting controls and occupancy sensors in low use areas

High efficiency LED light fixtures throughout, < 1 watt/sf target

Include fundamental building systems commissioning to ensure optimal energy operation



Actions Promoting Sustainability



Renewable Resources

Building roofs designed to accept photovoltaic solar panels, and the potential for a power/lease program
Design add-alternate system for solar water preheat for pool and domestic water use.
Purchase green power offset certificates to provide x% of the building's power usage



Materials

Incorporate recycled content building materials whenever appropriate including steel, concrete, rubber flooring, tile, plastic partitions and lockers, and many more.
Utilize regional recycling and composting collection network
Whenever possible, materials will be locally and/or regionally sourced to minimize transit fuel use & pollution.
Maximize reuse of existing building, materials and equipment.



Indoor Environmental Quality

Indoor chemical and pollutant control through ventilation, and particulate filtering
Low VOC paints, adhesives and coatings to improve indoor air quality
No formaldehyde, or ISO blocking or insulation
Non-CFC refrigerant systems
Increased ventilation effectiveness for fresher make-up air
Daylight and views from a majority of occupied spaces



Construction and Post Occupancy

Follow a construction waste management plan and environmental control plan
Employ a green custodial and maintenance operations plan with non-toxic cleaning materials and procedures
Create a building sustainable education program website and descriptive signage.

Sustainable Analysis

Current Process

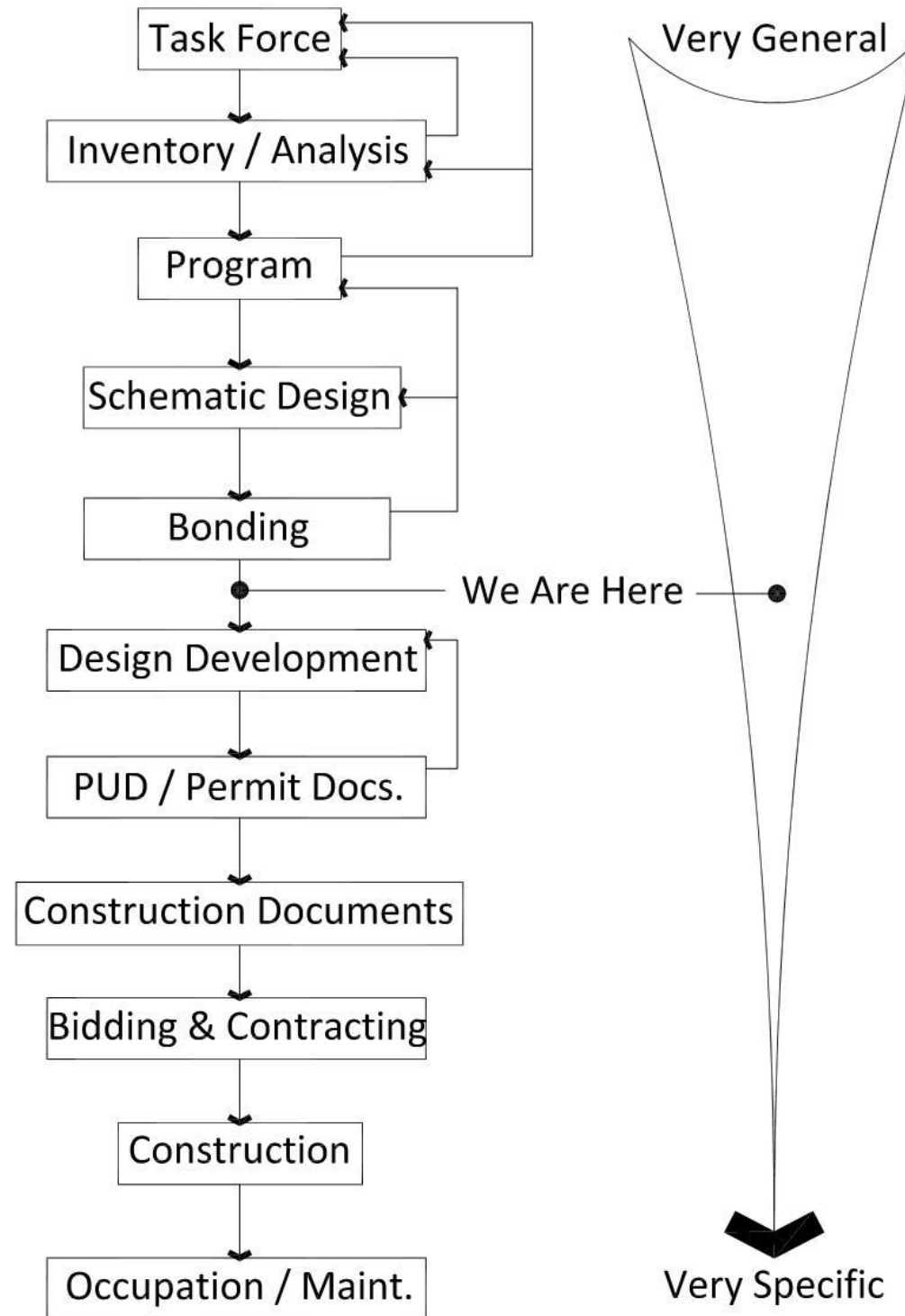
- Group 14 Engineering contracted for energy analysis
- Working within the Excel Energy design assist program
- Building baseline energy model to study alternatives
- Once complete, evaluate life-cycle cost and payback of the following alternatives
 - Solar photovoltaic (electrical energy)
 - Solar hot water preheat (domestic and pool water heating)
 - Micro-turbines
 - Geothermal ground source energy
 - Central plant hydronic heating and cooling

Next Steps

- Complete baseline energy model from schematic design docs
- Input Energy Options
- Develop construction cost estimates for energy options
- Create life-cycle cost comparison to guide efficiency measure decisions

Project Timeline

PLANNING AND DESIGN PROCESS



Overall Project Milestones

- January 2017 – Public Presentation
- Spring 2017 – Public Presentation
- Fall 2017 – Public Presentation

Recreation/Senior Center Project Milestones

- Summer 2017 – Recreation/Senior Center Construction Start
- Fall 2018 – Recreation/Senior Center Construction Complete

Memory Square Project Milestones

- Fall 2017 – Construction Start
- Spring 2018 – Construction Complete

Questions?



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